A METHOD FOR CALIBRATING A COLOR MARKING ENGINE FOR HALFTONE OPERATION

ABSTRACT OF THE DISCLOSURE

[0140] A method is disclosed for calibrating the half-tone operation of a color marking engine for creating images formed in bi-level or quad-level dot density formats. In the first step, a test pattern is run to provide an output image of a plurality of gray patches formed of first, second and third color toners. The gray patches of the output image include first, second and third sets of patches reproduced respectively at dot density levels of 25%, 50% and 75% of a maximum dot density. The relative color toner levels in the gray patches within each set of patches varies a predetermined increment in value above or below the toner levels in a median valued gray patch. The remaining steps of the method include visually selecting an output image of a selected color marking engine having a minimum color shift; determining a correction factor defined for each color at the maximum dot density; and storing the correction factor as an offset from maximum density for images created at the bilevel and quad-level formats.